

REMARKS

Applicants have carefully reviewed this Application in light of the Office Action mailed October 27, 2003. Although Applicants believe all pending claims, as originally submitted, are allowable over the references cited by the Examiner, Applicants have amended the claims to expedite issuance. Accordingly, Applicants respectfully request reconsideration and favorable action in this case.

Claim Rejections—35 U.S.C. § 102(e)

The Examiner rejected Claims 1, 5, and 12 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,275,499, issued to Wynn et al. (“*Wynn*”). *Wynn* does not disclose, teach, or suggest Applicants’ claimed invention as recited in Claims 1, 5, and 12.

Independent Claim 1 and Dependent Claim 5

Independent Claim 1, as amended, recites:

A communications device, comprising:
a backplane;
a plurality of backplane cards coupled to the backplane,
each backplane card assigned a Media Access Control (MAC)
address; and
a backplane switch coupled to the backplane and operable
to receive a first data packet with a first MAC address assigned to
a backplane card and to communicate the first data packet to the
backplane card assigned the first MAC address using the
backplane.

Wynn does not disclose, teach, or suggest “a plurality of backplane cards coupled to the backplane, each backplane card assigned a Media Access Control (MAC) address” or a backplane switch “operable to receive a first data packet with a first MAC address assigned to a backplane card and to communicate the first data packet to the backplane card assigned the first MAC address using the backplane,” as recited in Claim 1. Delivery unit 10 in *Wynn* uses Ethernet for external communications. See Figure 1. However, for internal communications among its application cards 102-106, delivery unit 10 uses iPL subframes that include “a header whose destination addresses determine the card or cards that receive iPL subframes.” (Col. 9, ll. 9-10). The destination address is not a MAC address, as recited in Claim 1.

Moreover, *Wynn* could not be combined with other prior art to teach the communications device of Claim 1. *Wynn* expressly teaches the use of different types of transport for internal communications within delivery unit 10 and external communications outside of delivery unit 10:

Delivery unit 10 uses *two basic types of internal transport*, referred to herein as the “STS-1P transport” and the “SBB-LS transport”. A *third type of transport* is used between MTXI 105 and switching matrix 11a, and is discussed below in the section entitled “Network Data Transport; MTXI Transport.”

(Col. 8, ll. 54-59) (emphasis added).

For at least these reasons, independent Claim 1 is patentable over *Wynn*. Accordingly, Applicants respectfully request reconsideration and the allowance of Claim 1, together with those claims that depend from Claim 1. Thus, *Wynn* teaches away from using Ethernet, a protocol used for external communications between devices, for internal communications among application cards 102-106.

Dependent claim 5 is patentable because, at a minimum, *Wynn* does not disclose, teach, or suggest the limitations of base Claim 1. In addition, Claim 5 is patentable because *Wynn* does not disclose, teach, or suggest a backplane bus “providing a dedicated bandwidth between a backplane card and the backplane switch,” as recited in claim 5. The Examiner relies on *Wynn*’s mention of OC3 for this limitation. *Wynn*, however, does not indicate that OC3 is used to provide dedicate bandwidth in a backplane between a backplane switch and a backplane card. Rather, *Wynn* mentions OC3 in the context of external communications. (Col. 2, ll. 6-8) (“[T]he unit controller will perform all the function required for line/trunk processing for a shelf of an OC3 delivery unit.”). For at least these reasons, dependent Claim 5 is patentable over *Wynn*. Accordingly, Applicants respectfully request reconsideration and the allowance of dependent Claim 5.

Independent Claim 12

Independent Claim 12, as amended, recites:

A method of communicating data packets using a communications device including a backplane coupled to a backplane switch and a plurality of backplane cards, the method comprising:

receiving, at the backplane switch coupled to the backplane, a first data packet with a first Media Access Control (MAC) address assigned to one of the backplane cards coupled to the backplane; and

communicating the first data packet from the backplane switch to the backplane card assigned the first MAC address using the backplane.

Wynn does not disclose, teach, or suggest the method recited in Claim 12. As explained above with reference to independent Claim 1, delivery unit 10 in *Wynn* uses Ethernet for external communication but not for internal communications among its application cards 102-106. Moreover, because *Wynn* expressly teaches the use of different types of transport for internal communications within delivery unit 10 and external communications outside of delivery unit 10, *Wynn* teaches away from using Ethernet for internal communications among application cards 102-106. For at least these reasons, independent Claim 12 is patentable over *Wynn*. Accordingly, Applicants respectfully request reconsideration and the allowance of Claim 12, together with those claims that depend from Claim 12.

Claim Rejections—35 U.S.C. § 103(a)

The Examiner rejected Claims 2-4, 13-16, 23-27, 33-36, 43-46, and 53-57 under 35 U.S.C. § 103(a) as being unpatentable over *Wynn* in view of U.S. Patent 6,216,167 issued to Bare ("*Bare*"). *Wynn* and *Bare* do not disclose, teach, or suggest Applicants' claimed invention as recited in Claims 2-4, 13-16, 23-27, 33-36, 43-46, and 53-57.

Independent Claim 23

Independent Claim 23 recites:

A backplane card assigned a first Media Access Control (MAC) address and coupled to a backplane within a communications device, the card comprising:
an internal interface coupled to a backplane bus;
a communication module operable to receive a first data packet from the backplane bus using the internal interface if the first data packet's destination address corresponds to the first MAC address, the communication module further operable to communicate a second data packet to another backplane card by associating the second data packet with a second MAC address assigned to the other backplane card and communicating the second data packet to the backplane bus using the internal interface.

Wynn and *Bare* do not disclose, teach, or suggest a backplane card “assigned a first Media Access Control (MAC) address,” and “a communication module operable to receive a first data packet from the backplane bus using the internal interface if the first data packet's destination address corresponds to the first MAC address” and “further operable to communicate a second data packet to another backplane card by associating the second data packet with a second MAC address assigned to the other backplane card and communicating the second data packet to the backplane bus using the internal interface,” as recited in Claim 23. As explained above with reference to independent Claim 1, delivery unit 10 in *Wynn* uses Ethernet for external communications but not for internal communications among its application cards 102-106. While *Bare* mentions Ethernet, it is also in the context of external communications between devices. (Col. 1, l. 35 – col. 2, l. 43). Thus, neither *Wynn* nor *Bare* disclose, teaches, or suggests the use of MAC addresses for communications to or from a backplane card using a backplane bus.

Furthermore, *Wynn* teaches away from the use of Ethernet for internal communications among its application card 102-106 because it expressly teaches the use of different types of transport for internal communications within delivery unit 10 and external communications outside of delivery unit 10. Thus, *Wynn* could not be combined with other prior art to teach the backplane card of Claim 23.

For at least these reasons, independent Claim 23 is patentable over *Wynn* and *Bare*. Accordingly, Applicants respectfully request reconsideration and the allowance of Claim 23, together with those claims that depend from Claim 23.

Independent Claim 33

Independent Claim 33 recites:

A communications device, comprising:
a backplane;
a plurality of backplane cards coupled to the backplane;
and
a backplane switch coupled to the backplane, the backplane switch operable to receive a first data packet with a first network address assigned to an external network device and a second data packet with a second network address assigned to one of the backplane cards, the backplane switch further operable to use a network protocol associated with the first and second network addresses to communicate the first data packet to the external network device assigned the first network address and to communicate the second data packet to the backplane card assigned the second network address, wherein the backplane switch communicates the second data packet to the backplane card using the backplane.

Wynn and *Bare* do not disclose, teach, or suggest “the backplane switch further operable to use a network protocol associated with the first and second network addresses to communicate the first data packet to the external network device assigned the first network address and to communicate the second data packet to the backplane card assigned the second network address, wherein the backplane switch communicates the second data packet to the backplane card using the backplane,” as recited in Claim 33. Neither *Wynn* nor *Bare* describes a backplane switch that use the same network protocol to communicate data packets to an external device and to communicate data packets to a backplane card using a backplane. Moreover, *Wynn* expressly teaches away because delivery unit 10 uses different types of transport for internal communications and external communications:

Delivery unit 10 uses *two basic types of internal transport*, referred to herein as the “STS-1P transport” and the “SBB-LS transport”. A *third type of transport* is used between MTXI 105 and switching matrix 11a, and is discussed below in the section entitled “Network Data Transport; MTXI Transport.”

(Col. 8, ll. 54-59) (emphasis added). For at least these reasons, independent Claim 33 is patentable over *Wynn* and *Bare*. Accordingly, Applicants respectfully request reconsideration and the allowance of Claim 33, together with those claims that depend from Claim 33.

Independent Claim 43

Independent Claim 43, as amended, recites:

A method of communicating data using a communications device, the communications device including a backplane coupled to a backplane switch and a plurality of backplane cards, the backplane switch coupled to at least one network device external to the communications device, the method comprising:

receiving, at the backplane switch, a first data packet with a first network address assigned to the external network device and a second data packet with a second network address assigned to one of the backplane boards;

using a network protocol associated with the first and second network addresses to communicate the first data packet from the backplane switch to the external network device assigned the first network address and to communicate the second data packet from the backplane switch to the backplane card assigned the second network address using the backplane.

Wynn and *Bare* do not disclose, teach, or suggest the method of claim 43. As explained above with reference to independent Claim 33, neither *Wynn* nor *Bare* describes using the same network protocol to communicate data packets from a backplane switch to an external device and to communicate data packets from a backplane switch to a backplane card using a backplane. Moreover, *Wynn* expressly teaches away because delivery unit 10 uses different types of transport for internal communications and external communications. For at least these reasons, independent Claim 43 is patentable over *Wynn* and *Bare*. Accordingly, Applicants respectfully request reconsideration and the allowance of Claim 43, together with those claims that depend from Claim 43.

Independent Claim 53

Independent Claim 53 recites:

A backplane switch coupled to a backplane of a communications device, the communications device having a plurality of backplane cards coupled to the backplane, the backplane switch comprising:

a plurality of internal ports, each internal port associated with a backplane card and operable to communicate with the associated backplane card using the backplane;

at least one external port associated with a network device external to the communications device and operable to communicate with the external network device; and

a processing module coupled to the internal ports and the external port, the processing module operable to receive a first data packet with a first network address assigned to the network device, to identify the external port associated with the network device, and to communicate the first data packet to the external port for communication to the network device using a network protocol, the processing module further operable to receive a second data packet with a second network address assigned to a backplane card, to identify one of the internal ~~port~~ ports associated with the backplane card, and to communicate the second data packet to the identified internal port for communication to the backplane card using the network protocol.

Wynn and *Bare* do not disclose, teach, or suggest the backplane switch of claim 53. As explained above with reference to independent Claim 33, neither *Wynn* nor *Bare* describes a processing module that uses the same network protocol to communicate data packets to an external device and to communicate data packets to a backplane card using a backplane. Moreover, *Wynn* expressly teaches away because delivery unit 10 uses different types of transport for internal communications and external communications. For at least these reasons, independent Claim 53 is patentable over *Wynn*. Accordingly, Applicants respectfully request reconsideration and the allowance of Claim 53, together with those claims that depend from Claim 53.

Dependent Claims 2-4, 13-16, 24-27, 34-36, 44-46, and 54-57

Dependent Claims 2-4, 13-16, 24-27, 34-36, 44-46, and 54-57 are patentable because, at a minimum, *Wynn* and *Bare* do not disclose, teach, or suggest the limitations of their respective base Claims 1, 12, 23, 33, 43, and 53.

Claim Rejections—35 U.S.C. § 103(a)

The Examiner rejects Claims 6-8, 10, 17-19, 21, 28-29, 31, 37-39, 41, 47-49, 51, and 58 under 35 U.S.C. § 103(a) as being unpatentable over *Wynn*, in view of *Bare* and further in view of U.S. Patent 6,157,649 issued to Peirce ("*Peirce*").

The Examiner rejects Claims 9 and 20 under 35 U.S.C. § 103(a) as being unpatentable over *Wynn*, in view of U.S. Patent 6,205,149 issued to Lemaire ("*Lemaire*").

The Examiner rejects Claims 30, 40, and 50 under 35 U.S.C. § 103(a) as being unpatentable over *Wynn*, in view of *Bare* and in further view of *Lemaire*.

The Examiner rejects Claims 11 and 22 under 35 U.S.C. § 103(a) as being unpatentable over *Wynn*, in view of U.S. Patent 6,426,952 issued to Francis ("*Francis*").

The Examiner rejects Claims 32, 42, 52, and 59 under 35 U.S.C. § 103(a) as being unpatentable over *Wynn*, in view of *Bare* and in further view of *Francis*.

Bare, *Peirce*, *Lemaire*, and *Fancies* fail to disclose the limitations of independent Claims 1, 12, 23, 33, 43, and 53 that, as discussed above, are missing from *Wynn*. As a result, because dependent Claims 6-11, 17-22, 28-32, 37-42, 47-52, and 58-59 include the limitations from their base Claims 1, 12, 23, 33, 43, and 53, dependent claims 6-11, 17-22, 28-32, 37-42, 47-52, and 58-59 are patentable over the Examiner's proposed combinations.

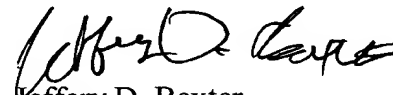
CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. In light of the Remarks set forth above, Applicants respectfully request further examination and full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, Applicants invite the Examiner to contact the undersigned attorney at the Examiner's convenience at (214) 953-6791.

Applicants have attached a check for \$770.00 to cover the cost of filing this Request for Continued Examination (RCE). Although Applicants believe that no other fees are due, Applicants authorize the Commissioner to charge any additional fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,
BAKER BOTTS L.L.P.
Attorneys for Applicants


Jeffery D. Baxter
Reg. No. 45,560

Correspondence Address:

Barton E. Showalter
Baker Botts L.L.P.
2001 Ross Avenue
Dallas, Texas 75201-2980
(214) 953-6509

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